DOCUMENT RESUME

ED 237 830 CG 017 084

AUTHOR Chaiken, Shelly
TITLE Heuristic Processing of Persuasion Cues.
PUB DATE May 83
NOTE 17p.; Paper presented at the Annual Meeting of the Midwestern Psychological Association (55th, Chicago, IL, May 5-7, 1983). Best copy available.
PUB TYPE Information Analyses (070) -- Reports - Evaluative/Feasibility (142) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Cognitive Processes; *Cognitive Style; Cues; Evaluation Criteria; *Heuristics; Interpersonal Communication; Motivation; *Persuasive Discourse; Research Methodology; State of the Art Reviews

ABSTRACT

The assumption that people exert considerable cognitive effort in processing incoming information has been complemented in recent years by the idea that people often perform tasks and make decisions after only minimal information processing. Although both the heuristic and systematic conceptualizations of information processing share the assumption that a primary motivation in a persuasion setting is to assess the validity of the conclusion, they differ in their portrayal of how this task is performed. Much of the recent research in persuasion has been guided by the systematic model. The heuristic model is novel in its explicit cognitive focus on the mediational role of simple schemas or cognitive heuristics that people have presumably developed. It is likely that a variety of simple decision rules may sometimes mediate the persuasive impact of communicator variables, including communicator characteristics, amount of persuasive argumentation, or argument quality. Since heuristic processing is relatively effortless, while systematic processing is effortful, it is likely that heuristic processing may predominate in many persuasion settings. Research generally supports the heuristic/systematic framework. Studies are currently underway in which priming tasks are employed to increase the likelihood that a heuristic process will be activated in a subsequent persuasion setting. (JAC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

BEST COPY AVAILABLE

ED237830

Heuristic Processing of Persuasion Cues

Shelly Chaiken

Vanderbilt University

Invited paper presented at Midwestern Psychological Association Meetings, Chicago, ILL., May 1983. Address inquiries to Shelly Chaiken, Department of Psychology, Wesley Hall, Vanderbilt University, Nashville, TN. 37240.

CG 017084

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Shelly Chaiken

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Heuristic Processing of Persuasion Cues

Shelly Chaiken

Vanderbilt University

The assumption that people exert considerable cognitive effort in processing incoming information has been complimented in recent years by the idea that people often perform tasks, and make decisions and other judgments after only minimal information processing. This latter viewpoint finds expression in formulations such as Shiffrin and Schneider's (1977a, 1977b) automatic versus controlled processing framework, Langer's (1978) concepts of mindlessness and mindfulness, and is indeed central to my own distinction in the persuasion area between heuristic and systematic information processing (Chaiken, 1978, 1980, Note 1; Chaiken & Eagly, in press).

The focus of my paper today is on the heuristic conceptualization of persuasion and what I'll try to do is to distinguish this theoretical perspective from other, more "systematic" conceptualizations of persuasion as well as from other theoretical perspectives which, on the surface, seem similar to the heuristic conceptualization. In addition, I'll briefly review research that provides indirect evidence supporting the utility of the heuristic model of persuasion and, finally, briefly describe some current research projects whose purpose is to provide more direct evidence for this conceptualization.

Both the heuristic and systematic conceptualizations of

persuasion share the important (and possibly limiting) assumption that a person's primary motivational orientation in a persuasion setting is to assess the validity of a message's overall conclusion. They differ, however, in their portrayal of how this task is performed. Like Shiffrin and Schneider's (1977) notion of controlled processing, systematic processing of persuasion information is effortful and presumably capacity limited: In the systematic mode, people actively attempt to comprehend, critically evaluate, and elaborate upon persuasive argumentation in deciding whether to accept a message's overall conclusion. In contrast, in the heuristic mode, people exert little, if any, cognitive effort in judging message validity: In this mode, message recipients may base their opinion judgments on a rather superficial assessment of a variety of persuasion cues, including information such as the communicator's identity as well as surface or structural aspects of the persuasive message itself. In essence, the systematic view of persuasion emphasizes detailed processing of message content and the role of argument- and issue-relevant cognitions in mediating opinion change. In contrast, the heuristic view de-emphasizes detailed processing of message content and focuses instead on the role of simple schemas, or cognitive heuristics, in mediating persuasion. Like automatic and controlled processing, heuristic and systematic processing of persuasive information are conceived of as relatively parallel, rather than mutually exclusive, modes of processing information. And, like automatic processing, heuristic processing of persuasion cues may be activated without much active control or attention by the message recipient. Thus, elements of a heuristic process will not necessarily be available to consciousness or recallable at a later time. Although there are no doubt circumstances in which people will quite self-consciously employ

the kinds of simple rules or schemas assumed by the heuristic model, these considerations suggest that people may often be unaware that heuristic processing has occurred and thus unable to report accurately on their use of cognitive heuristics (cf., Chaiken, 1980, Exp. 2; see also Bargh's (1982, Bargh & Pietromaco, 1982) on automatic processing and social perception). I'll return to this point when I discuss some of the problems in obtaining direct evidence for heuristic processing of persuasion cues.

A "systematic" perspective has guided much research in persuasion for a number of years. This general perspective is implicit in traditional information processing models of persuasion such as McGuire's (1968) reception/yielding framework and Greenwald's (1968) cognitive-response model and is illustrated by research suggesting, for example, that good comprehension of persuasive argumentation often facilitates opinion change (e.g., Chaiken & Eagly, 1976; Eagly, 1974) or that distraction often enhances persuasion by interfering with people's abilities to critically evaluate persuasive argumentation (e.g., Osterhouse & Brock, 1970; Petty, Wells, & Brock, 1976). Although earlier, primarily motivational perspectives on persuasion such as consistency theory (Heider, 1958) and Kelman's (1961) identification model of social influence share with the heuristic model the view that persuasion is not invariably the outcome of people's systematic processing of persuasive argumentation, the heuristic perspective is novel in its explicit cognitive focus on the mediational role of simple schemas or cognitive heuristics that people have presumably developed through their past experiences and observations (cf., Abelson, 1976; Stotland & Canon, 1972). In this regard, it should also be noted that the heuristic model is not equivalent to what Petty and Cacioppo (1981) refer to as the

peripheral route to persuasion. As most clearly articulated in their 1981 text (pp. 255-256), Petty and Cacippo's central versus peripheral framework represents a typological distinction between various attitude change processes. Under the central route, which does correspond to the systematic perspective, Petty and Cacippo classify persuasion models which emphasize detailed processing of persuasive argumentation and the importance of issue-relevant thinking. In contrast, persuasion models that specify factors or motives in persuasion settings that produce attitude change without any active message- or issue-relevant thinking are classified under the peripheral route. Although the heuristic model would, by this distinction, be classified as a peripheral approach, it is not synonymous with it since the peripheral label is also used to refer to classical and operant conditioning models of attitude change as well as theoretical approaches such as Kelman's (1961) identification model or Schlenker's (1980) impression management theory which specify motivational orientations on the part of message recipients other than the motivational orientation (assessing the validity of a message's overall conclusion) which is assumed to underlie both heuristic and systematic processing.

What are the kinds of simple rules or schemas which the heuristic model suggests often underlie persuasion effects? First, it is likely that a variety of simple decision rules may sometimes mediate the persuasive impact of communicator variables. For example, people may possess and utilize the rule that "statements by experts can usually be considered veridical" or that "statements by generally trustworthy communicators probably reflect those communicators' honest opinions." With respect to communicator attractiveness, heightened agreement with likable or physically attractive persons may reflect message

recipients' use of a simple schema such as "people generally agree with people they like" (cf., Stotland & Canon, 1972). The cognitive mediation of communicator effects postulated by the heuristic model differs from the mediation suggested by traditional information processing models (e.g., McGuire, 1968; Greenwald, 1968). In the latter, communicator variables are often assumed to indirectly influence yielding to a message's overall conclusion by way of their more direct impact on reception or argument-acceptance processes. According to the heuristic model, however, communicator variables can directly affect recipients' tendencies to yield to a message's conclusion without necessarily influencing their reception or evaluation of persuasive argumentation.

Research supportive of the heuristic/systematic framework has (correctly) assumed that message variables such as amount of persuasive argumentation (Chaiken, 1980) or argument quality (Petty et al, 1981) will typically exert a greater persuasive impact when recipients systematically process persuasive argumentation. Thus, the extent to which these message variables impact on opinion change may often serve as an indirect index of systematic processing. Nevertheless, it is also likely that these message variables as well as others can also influence persuasion via simpler heuristic processes. Langer's (Langer, Blank, & Chanowitz, 1978) work showing that compliance is often as high for a small request accompanied by a vacuous rason ("May I use the Xerox machine because I have to make copies") as for a request accompanied by a more valid reason ("May I use the Xerox machine because I'm in a rush") indicates quite clearly that people do often agree with messages on the basis of their structural or surface characteristics (vs. semantic content). If it is typically the case (at least outside of the laboratory) that

strong, compelling persuasive messages are, to a greater extent than weaker messages, associated with more arguments or longer, more detailed arguments, it is likely that people would abstract a rule suggesting that "length implies strength". Thus, without actually absorbing the semantic content of persuasive argumentation, people may agree more with messages containing many (vs. few) arguments, or (regardless of actual number of arguments) with longer (vs. shorter) messages. In some circumstances, judgments about the strength or quality of persuasive argumentation may also reflect little more than minimal processing. For example, people may consider an argument strong by noting whether it is accompanied by statistical evidence (regardless of its validity) or whether it is derived from a credible source. To summarize, consider a tenure candidate's publications as persuasive arguments supporting his/her tenure case. Members of a tenure committee might consider the candidate's case strong and thus vote for promotion not (God forbid) because they read the candidate's papers, but, rather, because they note he/she has published many (vs. few) articles or that these articles have appeared in high (vs. low) prestige journals.

Since heuristic processing is relatively effortless and may be activated without much active control or attention by message recipients whereas systematic processing is effortful and may be generally avoided by people, it seems likely that heuristic processing may predominate in many persuasion settings. However, when motivation to engage in message- and issue-relevant thinking is high, and at least a modicum of ability to do so exists, people may be more likely to engage in systematic processing. Studies which have attempted to vary people's motivation to process systematically by manipulating the personal relevance of message topics or the consequentiality of

recipients' opinion judgements have generally supported this prediction (Chaiken, 1980; Petty, Cacioppo, & Goldman, 1981): Higher levels of involvement encourage systematic processing with the consequence that message variables such as the amount or quality of argumentation exert a greater persuasive impact when involvement is high than when involvement is low. Conversely, communicator variables such as likability and expertise exert a greater persuasive impact when involvement is low than when issue- or response-involvement is high. Also consistent with the view that high involvement fosters greater systematic processing is Petty and Cacioppo's recent finding (JPSP, in press) that, under low issue involvement, subjects were more persuaded by messages containing 9 rather than 3 arguments, regardless of the quality of these arguments. Under high involvement, however, subjects agreed more with messages containing 9 arguments when the quality of these arguments was high but less with 9-argument messages when argument quality was low.

Laboratory manipulations of response or issue involvement primarily affect people's motivation to engage in systematic processing. However, ability to process message content must also be considered. A few studies have examined individual differences in message recipients' abilities to engage in systematic processing by comparing subjects who possess a great deal of knowledge versus little prior knowledge about the message topic (Fiske & Kinder, 1981; Wood, Kallgren, & Preisler, Note 1). For example, Wood and her colleagues recently found that highly knowledgeable subjects, compared to subjects with little prior knowledge, more carefully analyzed message content and were more influenced by the quality of persuasive argumentation. Further, consistent with the idea that low ability subjects would manifest a greater tendency to process heuristically,

low, but not high, knowledge subjects in this study showed greater agreement with long, rather than short, messages, even though these messages contained an equivalent number of persuasive arguments.

In situations, then, where both motivation and ability to process message content is High, persuasion is likely to depend somewhat more on recipients' systematic processing of message content. Although heuristic processing is assumed to proceed in parallel with systematic processing or at least be initiated in such situations, systematic processing may reduce the persuasive impact of persuasion cues which are typically processed heuristically. For example, although long messages may often lead to greater persusion than short messages because recipients assume that "length implies strength", careful processing of the semantic content of persuasive messages may provide information contradicting this simple heuristic. Indeed, the studies I've already mentioned have found that when recipients are apparently engaging in systematic processing, persuasion cues such as communicator likability and expertise and message length tend to have little impact on persuasion (Chaiken, 1980; Petty, Cacioppo, & Goldman, 1981; Wood, Kallgren & Preisler, Note 1).

When recipient involvement is low or, regardless of involvement, people have little ability to scrutinize message content and engage in issue-relevant thinking, persuasion is more likely to reflect recipients' use of simple decision rules or cognitive heuristics. A recent study by Alice Eagly and myself (Chaiken & Eagly, in press) suggests further, that by increasing the salience of persuasion cues that are typically processed in heuristic fashion, heuristic processes may be more likely to be activated. In brief, in two experiments, we presented subjects with either a video-taped or audio-taped or written persuasive message which was attributed to either a likable or

unlikable communicator. Based on the assumption that non-verbal communicator-related cues in the two broadcast modalities would draw recipients attention to the communicator, we expected that the liking/agreement schema ("people generally agree with people they like") would be more likely to be activated when recipients were exposed to video-taped or audio-taped, rather than written, messages. Consistent with this expectation, we found in both studies that communicator likability and communication modality interacted to affect opinion change. Specifically, whereas the likable communicator proved significantly more persuasive than his unlikable counterpart in both videotaped and audiotaped conditions of the experiment, communicator likability did not significantly impact on persuasion when subjects received a written communication.

The research I've cited generally supports the utility of the heuristic/systematic framework and, further, has provided relatively direct evidence regarding the cognitive mediation of opinion change specified by the systematic conceptualization. For example, consistent with the assumption that higher levels of involvement foster systematic processing, high (vs. low) involvement subjects in the Chaiken (1980, Exp. 1) study spent more time reading the persuasive message, reported spending more time thinking about its arguments, recalled more arguments, and generated more message-based cognitions. At the same time, however, this research has provided only indirect evidence supportive of the heuristic view of persuasion: Under low involvement, low ability, and high salience, persuasion cues such as communicator likability, communicator expertise and message length have been shown to have an enhanced persuasive impact. While this research (e.g., Chaiken, 1980) indicates that the persuasive impact of these cues is not typically

mediated by subjects' attention to, comprehension of, or elaboration of persuasive argumentation, little direct evidence has to date been obtained with respect to whether subjects have actually employed the kinds of simple decision rules or schemas specified by the heuristic model (e.g., "people generally agree with people they like", "experts' statements can be considered veridical", "longer messages are stronger messages").

As I mentioned earlier, because heuristic processes may be activated without much active control or attention, people may often (though not always, see Chaiken, Note 1) be unaware that heuristic processing has occurred and thus unable to report accurately on their possible use of cognitive heuristics. Thus, self-report measures may not be very useful in documenting the role that such heuristics play in persuasion. In order to provide more direct evidence for the heuristic model of persuasion, Andy Hicks, Suzanne Yates and myself are currently conducting a number of studies in which priming tasks are employed in order to increase the likelihood that a heuristic process will be activated in a subsequent persuasion setting. Because this research is only in its early stages, I'll just briefly describe for you the kinds of things we're doing and our basic hypotheses.

One of these experiments investigates the idea that the liking/agreement heuristic underlies the persuasive impact of communicator likability; the second examines the impact of an expertise schema on opinion change; and the third study examines peoples' possible use of the simple heuristic, "message length implies message strength". In each study, subjects first are exposed to a priming manipulation which is designed to vary the associative link between concepts involved in the particular heuristic process investigated (e.g., the link between interpersonal liking and interpersonal agreement). Afterwards, in an ostensibly unrelated study, subjects are exposed to a persuasive message in a setting in which one of our three focal cues is manipulated (e.g., communicator likability, communicator expertise, message length). In essence, our major predictions are that subjects for whom the associative link between concepts has been made strong (vs. weak) via the priming manipulation will show a greater tendency to utilize our focal heuristic cues in forming their opinion judgments. To make these points more concretely, let me explain the procedures we're using in our study on message length. In the priming phase of this study, subjects judge the quality of pairs of persuasive messages. In all, subjects judge 10 pairs of messages. Each pair concerns a different topic and, within each pair, one message is relatively long whereas one message is relatively short. For half of our subjects (HIGH ASSOCIATION), message length is highly correlated with message strength---that is, the longer message of each message pair typically contains more arguments and more high quality arguments than the shorter message. However, for the remaining subjects (LOW ASSOCIATION), message length is virtually uncorrelated with message strength---that is, although one message is longer than the other, it

may contain more or fewer arguments or more or fewer high quality arguments. Immediately after this priming task, subjects are exposed to six new perusasive messages on a new set of topics. These messages are presented one at a time to subjects on a computer monitor and subjects make their agreement responses by striking one of 7 labelled keys on the computer's keyboard. For each subject, three messages are relatively long whearas three are relatively short. Further, in this phase, the long versus short version of each persuasive message differ only in terms of length but not in terms of the number, strength, or essential meaning of its arguments. Our major prediction in this study is that subjects who perceive a stronger relationship between message length and message strength (i.e., HIGH vs. LOW Association subjects) will be more strongly affected by our manipulation of message length (long vs. short) during the persuasion phase of the study: Relative to low association subjects, high association subjects should agree more with long (vs. short) messages and should make their agreement responses more quickly and more confidently.

In summary, this study and the other two on the liking/agreement and expertise/agreement schemas, represent some of our current work in this area. If successful, these studies should provide relatively direct evidence for the cognitive mediation of opinion change specified by the heuristic model, evidence that, to date, has been relatively difficult to obtain in other ways.

References

Abelson, R.P. (1976). Script processing in attitude formation and decision-making. In J.S. Carroll & J.W. Payne (Eds.) Cognition and Social Behavior. Hillsdale, NJ: Erlbaum.

Bargh, J.A. (1982). Attention and automaticity in the process of self-relevant information. Journal of Personality and Social Psychology, 43, 425-436.

Bargh, J.A., & Pietromonaco, P. (1982). Automatic information processing and social perception: The influence of trait information presented outside of conscious awareness on impression formation. Journal of Personality and Social Psychology, 43, 437-449.

Chaiken, S. (1978). The use of Source Versus Message Cues in Persuasion: An Information Processing Analysis. Unpublished doctoral dissertation, University of Massachusetts-Amherst.

Chaiken, S. (1980). Heuristic versus systematic information processing and the use of source versus message cues in persuasion. Journal of Personality and Social Psychology, 39, 752-756.

Chaiken, S. (1982). The heuristic/systematic processing distinction in persuasion. Paper presented at Symposium on Automatic Processing, Society for Expermiental Social Psychology, Nashville, IN.

Chaiken, S., & Eagly, A.H. (1976). Communication modality as a determinant of message persuasiveness and message comprehensibility. Journal of Personality and Social Psychology, 34, 606-614.

Chaiken, S., & Eagly, A.H. (in press). Communication modality as a determinant of persuasion: The role of communicator salience. Journal of Personality and Social Psychology.

Fiske, S., & Dyer, L. Cognitive analysis of involvement in persuasion. Paper presented at Symposium on Persuasion and Cognitive Processing, American Psychological Association meetings, Washington, DC.

Greenwald, A.G. (1968). Cognitive learning, cognitive responses to persuasion, and attitude change. In A.G. Greenwald, T.C. Brock, & T.M. Ostrom (Eds.), Psychological Foundations of Attitudes. New York: Academic Press.

Heider, F. (1958). The Psychology of Interpersonal Relations. New York: Wiley.

Kelman, H.C. (1961). Processes of opinion change. Public Opinion Quarterly, 25, 57-78.

Langer, E.J. (1978). Rethinking the role of thought in social interaction. In J.H. Harvey, W. Ickes, and R.F. Kidd (Eds.), New Directions in Attribution Research, (Vol. 2). Hillsdale, NJ: Erlbaum.

Langer, E.J., Blank, A., & Chanowitz, B. (1978). The mindlessness of ostensibly thoughtful action: The role of "placebic" information in interpersonal interaction. Journal of Personality and Social Psychology, 36, 635-642.

McGuire, W.J. (1968). Personality and susceptibility to social influence. In E.F. Borgatta & W.W. Lambert (Eds.), Handbook of Personality Theory and Research. Chicago: Rand McNally.

Osterhouse, R.A., & Brock, T.C. (1970). Distraction increases yielding to counter-propaganda by inhibiting counterarguing. Journal of Personality and Social Psychology, 15, 344-358.

Petty, R.E., & Cacioppo, J.T. (1981). Attitudes and Persuasion: Classic and Contemporary Approaches. Dubuque, Iowa: Wm. C. Brown Co.

Petty, R.E., Cacioppo, J.T., & Goldman, R. (1981). Personal involvement as a determinant of argument-based persuasion. Journal of Personality and Social Psychology, 41, 847-855.

Petty, R.E., & Cacioppo, J.T. (1982). The effects of involvement on response to argument quality and quantity: Central and peripheral routes to persuasion. Paper presented at Symposium on Persuasion and Cognitive Processing, American Psychological Association meetings, Washington, DC.

Petty, R.E., Wells, G.L., & Brock, T.C. (1976). Distraction can enhance or reduce yielding to propaganda: Thought disruption versus justification. Journal of Personality and Social Psychology, 34, 874-884.

Schneider, W., & Shiffrin, R.M. (1977). Controlled and automatic human information processing: I. Detection, search, and attention. Psychological Review, 84, 1-66.

Schlenker, B.R. (1980). Impression Management: The Self-Concept, Social Identity, and Interpersonal Relations. Monterey, CA: Brooks/Cole.

Shiffrin, R.M., & Schneider, W. (1977). Controlled and automatic human information processing: II. Perceptual learning, automatic attending, and a general theory. Psychological Review, 84, 127-190.

Stotland, E., & Canon, L.K. (1972). Social Psychology: A Cognitive Approach. Philadelphia, W.B. Saunders.

Wood, W., Kallgren, C.A., & Preisler, R.M. (1982). Access to attitude-relevant information in memory as a determinant of persuasion: The role of message and communicator attributes. Unpublished manuscript, Texas A & M University.